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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@choate.com

Office Action Commons		Application	on No.	Applicant(s)				
		10/825,68	6	HAAPIAINEN, HE	HAAPIAINEN, HEIKKI OLAVI			
	Office Action Summary	Examiner		Art Unit				
		Gay Ann S	•	3635				
Period fo	The MAILING DATE of this communication Reply	on appears on the	cover sheet with the	correspondence ad	ddress			
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR INCHEVER IS LONGER, FROM THE MAILLI INSIGHTS IN THE MAILLI INS	NG DATE OF TH CFR 1.136(a). In no evention. period will apply and will y statute, cause the app	IIS COMMUNICATION Cent, however, may a reply be Il expire SIX (6) MONTHS froication to become ABANDON	ON. timely filed om the mailing date of this on NED (35 U.S.C. § 133).	·			
Status								
1)⊠	Responsive to communication(s) filed on	n 09 December 2	008 and 25 March 20	009				
•		☐ This action is n						
3)	Since this application is in condition for a	_		rosecution as to the	e merits is			
٠,١	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
· ·	Claim(s) <u>1-26</u> is/are pending in the applic	cation						
•	4a) Of the above claim(s) <u>9 and 26</u> is/are withdrawn from consideration.							
	□ Claim(s) is/are allowed.							
	Claim(s) <u>1-8 and 10-25</u> is/are rejected.							
· ·	Claim(s) is/are objected to.							
•	Claim(s) are subject to restriction	and/or election re	equirement					
		ana, or orodaon i	oquii om om.					
	on Papers							
•	The specification is objected to by the Ex		_					
10)⊠	10)⊠ The drawing(s) filed on <u>25 <i>March</i> 2009</u> is/are∶ a)⊡ accepted or b)⊠ objected to by the Examiner.							
	Applicant may not request that any objection							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority ι	ınder 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some coll None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
2) Notice (3) Inform	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-9- mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	48)	4) Interview Summa Paper No(s)/Mail 5) Notice of Informal 6) Other:					

DETAILED ACTION

Response to Amendment

In the "Remarks" section of the "Response to Non-Compliant Amendment" filed 25 March 2009, in the paragraph spanning pages 13 and 14, Applicant has a discussion concerning U.S. Patent No. 6,158,178 to JEFFERS ET AL. and U.S. Patent No. 6,189,270 to <u>JEFFERS ET AL.</u> The examiner notes that there was a typographical error on page 15, line 11, of the Office Action mailed 09 June 2008, where the JEFFERS ET AL. reference was listed as "U.S. Patent No. 6,158,178". The examiner meant to list the JEFFERS ET AL. reference as U.S. Patent No. 6,189,270 and this is clear from the record since only U.S. Patent No. 6,189,270 to JEFFERS ET AL. is cited on the Notice of References Cited (i.e., PTO-892), and U.S. Patent No. 6,158,178 to JEFFERS ET AL. is not listed on the Notice of Reference Cited (i.e., PTO-892). Further, U.S. Patent No. 6,158,178 to JEFFERS ET AL. is not even a reference of record in the application as not having been listed on either a Notice of Reference Cited (i.e., PTO-892) or Information Disclosure Statement (i.e., PTO-1449). Therefore, the examiner has made the correction in heading of the 35 U.S.C. 102(b) rejection in the present Office Action.

Response to Amendment – NEW MATTER

The amendment filed 25 March 2009 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35

U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

- (1) amended Fig. 6 (in particular, the new openings 23 placed on the collector ducts 19 and reference numerals 4 and 5 on the left-hand side of the floor or air duct network (16));
- (2) page 5 of 15 of the "Response to Non-Compliant Amendment" filed 25 March 2009, line 4, the change of "air-duct network 16" to --air-channelduct network 516--; and
- (3) page 5 of 15 of the "Response to Non-Compliant Amendment" filed 25 March 2009, lines 10-11, the addition of reference numeral –23-- after the words "by adjusting the size of the flow openings".

Applicant is required to cancel the new matter in the reply to this Office Action.

Further, since Fig. 6 and the amendments to the two full paragraphs on the bottom of page 7 of the original specification constitutes new matter, the "Amendments the Drawings" section and the "Amendments to the Specification" section of the "Response to Non-Compliant Amendment" filed 25 March 2009 have not been entered by the examiner and the examiner's objections to the drawings and specification, as set forth in the Office Action mailed 09 June 2008, are being repeated below.

Drawings

The drawings were received on 25 March 2009. These drawings are NOT acceptable to the examiner (and have not been entered as constituting new matter added to the original disclosure) for the reasons set forth below.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the

- (1) "structure of claim 1 further comprising: a distribution duct" as specifically recited in lines 1-2 of claim 3;
- (2) "distribution duct is located at an edge of the structure and the collection duct is located at an edge of the structure opposite the distribution duct" as specifically recited in lines 4-5 of claim 7 (i.e., wherein the structure comprises the recitations in claim 1);
- (3) "structure is at least part of a wall structure, and the distribution duct is arranged in a lower part of the wall structure and the collector duct is arranged in an upper part of the wall structure" as specifically recited in lines 1-3 of claim 8;
- (4) "structure of claim 1 further comprising: a collector duct with at least one opening" as specifically recited in lines 1-2 of claim 10;
- (5) "collection duct includes a plurality of openings with progressively changing sizes" as specifically recited in lines 1-2 of claim 13;
- (6) "collection duct includes a plurality of openings, the openings ordered to be progressively closer to one another" as specifically recited in lines 1-2 of claim 14; and

(7) "structure according to claim 1, wherein the structure includes a wall and at least one of a floor and ceiling" as specifically recited in lines 1-2 of claim 17.

must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to because:

- (1) Fig. 2, approximately near the two reference numerals "9" and "9" in the upper middle of the figure, there is an lead line with arrow at the end thereof which is not leading to a reference numeral and the examiner suggest the either the reference numeral –11-- should be inserted to represent the "air channel" or else the lead line deleted;
- (2) Fig. 3, the three "arrows" in the figure should be labeled with a lead line leading to a reference numeral or character and explained in the specification;
- (3) Fig. 6, the lead line leading from reference numeral "18" should not cross the arrow in collector duct 19;
 - (4) Fig. 9, the figure should not be enclosed within a "box"; and
- (5) Fig. 10 is not understood because it is not clear if the plastic pipes an below the structure of concrete in which case they should be shown in dashed outline.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the

brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

<u>The abstract should be in narrative form</u> and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc. (Emphasis added).

The abstract of the disclosure is objected to because:

(1) lines 4-9 are not in narrative form (i.e., short concise sentences), but rather are in claim form (i.e., one long run-on sentence).

Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities:

- (1) reference numeral "4" has been called "rigid surface sheet", "water resistant sheet" and "mineral board" throughout the specification and it is not clear that these are all the same structure;
- (2) reference numeral "13" has been called "thermal or acoustic insulation" and "distribution duct" throughout the specification and it is not clear if this is the same structure;
- (3) reference numeral "16" has been called "floor", "air-duct network", and "wall" throughout the specification and it is not clear if this is all the same structure.

Appropriate correction is required.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The "Method and" should be deleted from the title since the method has been restricted out and those claims canceled.

Further, since many examiners use the title of the invention for searching purposes, the examiner suggests that Applicants amend the title of the invention to one that is clearly indicative of the patentable feature of the invention.

However, should Applicants choose not to amend the title of the invention, the examiner will amend the title of the invention at the time of allowance, if any (pursuant to the Manual of Patent Examining Procedure (MPEP) § 606.01, wherein it states that "[i]f a satisfactory title is not supplied by the applicant, the

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examiner may, at the time of allowance, change the title by examiner's amendment.").

Claim Objections

Claims 15, 16, 18, 22, and 24 is objected to because of the following informalities:

- (1) **claim 15**, line 2, after the word "comprises", the word –a-- should be inserted for proper grammar;
- (2) **claim 16**, line 2, after the word "comprises", the word –a-- should be inserted for proper grammar;
- (3) **claim 18**, line 3, the recitation of "an second air channel" is grammatically incorrect and the word "an" should be changed to --a--.
- (4) **claim 22**, line 2, after the word "comprises", the word –a-- should be inserted for proper grammar;
- (5) **claim 24**, line 2, after the word "comprises", the word –a-- should be inserted for proper grammar.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-8 and 10-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1, line 8, the recitation of "sufficiently low to inhibit fungal growth" constitutes new matter as not being supported by the original disclosure.

Claim 17, lines 2-3, the recitation of "wherein the structure of claim 1 forms one of the wall, floor or ceiling" constitutes new matter as not being supported by the original disclosure.

Claims 3-8 and 10-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 3-8 and 10-14 contain subject matter directed to the embodiment or species of the invention shown in Fig. 6 (i.e., distribution duct 13 and collection duct 19), while claim 1 (on which claims 3-14 either directly or indirectly depend) contain subject matter directed to the embodiment or species of the invention shown in any of Figs. 1-5. However, the specification fails to describe how the

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embodiment or species of Fig. 6 is related to the embodiment or species of Figs. 1-5. Fig. 6 does not show the side wall, end wall, or floor thereof as being made up of a room-bounding structure comprised of a rigid sheet, a spacer protrusion extending from a first surface of the rigid sheet, and a rigid surface sheet contacting the spacer protrusion and forming an air channel between the first surface of the rigid sheet and the rigid surface sheet. Therefore, the application is not enabled for a distribution duct with at least one opening for introducing ventilation air to the structure recited in claim 1.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 and 10-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 6, the recitation of "the first surface side" is vague, indefinite, and confusing for lack of antecedent basis since it does not clearly refer back to "a first surface" of the first rigid sheet introduced in line 3.

Claim 2, lines 1-2, the recitation of "comprising a plurality of spacer protrusions" is vague, indefinite, and confusing as lacking antecedent basis because it is not clear if the spacer protrusion introduced in claim 1, line 3 is one of the plurality or if the plurality are in addition to the spacer protrusion introduced in claim 1, line 3.

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Claims 3-8, the recitation of "distribution duct" is vague, indefinite, and confusing as it is not understood how the distribution duct relates to the rigid sheet having a spacer protrusion in contact with a rigid surface sheet to form an air channel recited in claim 1.

Claims 7, 8, and 10-14, the recitation of "collector duct" is vague, indefinite, and confusing as it is not understood how the distribution duct relates to the rigid sheet having a spacer protrusion in contact with a rigid surface sheet to form an air channel recited in claim 1.

Claim 17, lines 1-3, the recitation of "A structure according to claim 1, wherein the structure includes a wall and at least one of a floor and ceiling, wherein the structure of claim 1 forms one of the wall, floor or ceiling" Is vague, indefinite, and confusing as not being clear. How does the structure comprise/form a part of itself?

Also, claim 17 recites "structure according to claim 1" twice and it is not allowed in patent claims to recite the same structure twice.

Claim 17, lines 1-2, the recitation that "the structure includes a wall and at least one of a floor and ceiling" is vague, indefinite, and confusing as not being understood. It is not clear how the structure recited in claim 1 includes or comprises a wall or a floor or a ceiling. Is Applicant trying to claim that the structure recited in claim 1 is part of a wall which is attached to a floor or a ceiling?

Claim 18, lines 2-4, the recitation of "a second spacer protrusion on a second surface of the first rigid sheet, wherein contact between the second

spacer protrusion and third rigid surface sheet forms an second air channel on the second surface side of the first rigid sheet" is vague, indefinite, and confusing as not being clear. Reference numeral 3 has been disclosed in the specification as representing a "spacer protrusion". Reference numeral "7" has been disclosed in the specification as representing an "end flange", but it appears in the claim that Applicant is reciting the end flange 7 as a second spacer protrusion. Applicant cannot use the same terminology for different structures and cannot call the structure represented by reference numeral "7" a spacer protrusion in the claims when that structure has not been represented as such in the specification.

Additionally, the recitation of "and third rigid surface sheet" lacks antecedent basis because if Applicant's are introducing a new structural feature, they must recite --a third rigid surface sheet--.

Further, the recitation of "the second surface side" lacks antecedent basis because only a second surface has been introduced, not a second surface side.

Claim 21, lines 1-2, the recitation of "a plurality of spacer protrusions on the second surface distributed over the area of the first rigid sheet" is vague, indefinite, and confusing as lacking antecedent basis since it is not clear if the spacer protrusion introduced in lines 1-2 of claim 18 is one of the plurality or if the plurality is in addition to the one introduced in lines 1-2 of claim 18.

Additionally, it is not seen how the two edge flanges (7, 7) at the ends of the rigid sheet (1) are "distributed over the area of the rigid sheet"?

Further, line 2, the recitation of "the rigid sheet" is vague, indefinite, and confusing for lack of antecedent basis since it is not clear if this is referring back to the "rigid sheet" introduced in line 2 of claim 1 or the "rigid surface sheet" introduced in line 5 of claim 1 or the "another rigid surface sheet" introduced in line 3 of claim 18.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 17-21, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by JEFFERS ET AL. (U.S. Patent No. 6,189,270).

As to claim 1 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> disclose a room-bounding structure comprising:

a first rigid sheet (22 in Figs. 8A and 8B or 22a in Fig. 17 and 18), which is substantially impermeable to moisture (metal sheet 22 or 22a – see col. 5, line 42 and thin-line diagonal cross-hatching representing metal according to drawing symbols); and

a spacer protrusion (30) extending from a first surface (24) of the first rigid sheet (22 or 22a), the protrusion (30) being rigidly formed from the first rigid sheet (22 or 22a),

wherein contact between the spacer protrusion (30) and a second rigid surface sheet (90 that would be adjacent right 24 in Figs. 8A and 8B or right 90 in Fig. 18) forms an air channel on the first surface (24 in Figs. 8A, 8B, and 18) side of the first rigid sheet (22 or 22a) "for ventilating air through the structure, such that air between the first surface side of the first rigid sheet and the second rigid surface sheet has moisture content sufficiently low to inhibit fungal growth" (the structure of <u>JEFFERS ET AL.</u> is capable of performing the intend use within quotation marks).

As to claim 2 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> disclose the structure of claim 1 as discussed above, and <u>JEFFERS ET AL.</u> also disclose a plurality of spacer protrusions (30, 30) distributed over the area of the first rigid sheet (22 or 22a).

As to claim 17 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> disclose the structure of claim 1 as discussed above, and <u>JEFFERS ET AL.</u> also disclose that the structure includes a wall and at least one of a floor and ceiling, wherein the structure of claim 1 forms one of the wall, floor or ceiling (<u>JEFFERS ET AL.</u> disclose that his partition wall system is meant to be used in an office building environment and

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therefore, it is clear his wall system is meant to extend between a floor and a ceiling).

As to claim 18 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> disclose the structure of claim 1 as discussed above, and <u>JEFFERS ET AL.</u> also disclose a second spacer protrusion (unnumbered edge flange connected to 22 in Figs. 8A and 8B or 32 and 44) on a second surface (surface opposite 24) of the first rigid sheet (22 or 22a), wherein contact between the second spacer protrusion (unnumbered edge flange connected to 22 in Figs. 8A and 8B or 32 and 44) and a third rigid surface sheet (left 22 in Figs. 8A and 8B or left 90 in Fig. 18) forms a second air channel on the second surface side of the first rigid sheet (right 22 or 22a).

As to claim 19 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> discloses the structure of claim 18 as discussed above, and <u>JEFFERS ET AL.</u> also disclose that the spacer protrusion (unnumbered edge flange connected to 22 in Figs. 8A and 8B or 32 and 44) on the second surface is rigidly formed from the first rigid sheet (right 22 or 22a).

As to claim 20 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> disclose the structure of claim 18 as discussed above, and <u>JEFFERS ET AL.</u> also disclose that the spacer

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protrusion (unnumbered edge flange connected to 22 in Figs. 8A and 8B or 44) on the second surface is an edge flange (unnumbered edge flange connected to 22 in Figs. 8A and 8B or 44) bent into the edge of the third rigid surface sheet (left 22 in Figs. 8A and 8B or left 90 in Fig. 18).

The examiner notes that "bent" is a process limitation so that the recitation that the edge flange is "bent" is considered to be product-by-process and in product-by-process claiming it is the product that forms the patentable part of the invention.

As to claim 21 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> disclose the structure of claim 18 as discussed above, and <u>JEFFERS ET AL.</u> also disclose a plurality of spacer protrusions (unnumbered edge flange connected to 22 in Figs. 8A and 8B or 32 and 44) on the second surface distributed over the area of the first rigid sheet (right 22 or 22a).

As to claim 25 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> disclose the structure of claim 1 as discussed above, and <u>JEFFERS ET AL.</u> also disclose an attachment flange (left and right flange bent down from 24 in Fig. 8B) connected to an edge of the first rigid sheet (right 22 or 22a), and "configured to attach to an adjacent structure to form a rigid unified structure" (the structure of <u>JEFFERS ET AL.</u> is capable of performing the recited intended use within quotation marks).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-8 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>JEFFERS ET AL.</u> (U.S. Patent No. 6,189,270) in view of <u>PALMER ET AL.</u> (U.S. Patent No. 5,746,653).

As to claim 3 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of enablement/written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> disclose the structure of claim 1 as discussed above.

<u>JEFFERS ET AL.</u> fail to explicitly disclose a distribution duct with at least one opening for introducing ventilating air to the structure and into the air channel.

PALMER ET AL. discloses a room-bounding structure including apparatus that can distribute and collect air which includes a distribution duct (20a or 20b in Fig. 4) with at least one opening (see hole pattern 21a or 21b) "for introducing ventilating air to the structure and into the air channel" (the structure of PALMER ET AL. is capable of performing the recited intended use within quotation marks).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the structure of <u>JEFFERS ET AL.</u> by including a

distribution duct with at least one opening as taught by <u>PALMER ET AL.</u> in order to easily distribute ventilating air to the structure.

As to claim 4 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of enablement/written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> in view of <u>PALMER ET AL.</u> disclose the structure of claim 3 as discussed above, and <u>PALMER ET AL.</u> also disclose that the distribution duct (20a or 20b in Fig. 4) introduces ventilating air from a dry interior space of a building.

As to claim 5 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of enablement/written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> in view of <u>PALMER ET AL.</u> disclose the structure of claim 3 as discussed above, and <u>PALMER ET AL.</u> also disclose that the distribution duct (20a or 20b) includes a plurality of openings (see hole pattern 21a or 21b which shows openings with progressively changing sizes) with progressively changing sizes "configured to minimize dead space in the air channel" (the structure of <u>PALMER ET AL.</u> is capable of performing the recited intended use within quotation marks).

As to claim 6 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of enablement/written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> in view of <u>PALMER ET AL.</u> disclose the structure of claim 3 as discussed above, and <u>PALMER ET AL.</u> also disclose that the distribution duct (20a or 20b) includes a plurality of openings (see hole pattern 21a or 21b which shows openings which are progressively

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closer to one another), the openings ordered to be progressively closer to one another "to minimize dead space in the air channel" (the structure of <u>PALMER ET AL.</u> is capable of performing the recited intended use within quotation marks).

As to claim 7 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of enablement/written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> in view of <u>PALMER ET AL.</u> disclose the structure of claim 3 as discussed above, and <u>PALMER ET AL.</u> also disclose a collection duct (20 in Fig. 4) with at least one opening (see hole pattern 21) "for removing ventilating air from the structure" (the structure of <u>PALMER ET AL.</u> is capable of performing the recited intended use within quotation marks), wherein the distribution duct (20a or 20b) is located at an edge of the structure which is on the opposite side of the air channel from the distribution duct (20a or 20b).

As to claim 8 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of enablement/written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> in view of <u>PALMER ET AL.</u> disclose the structure of claim 7 as discussed above, and <u>PALMER ET AL.</u> also disclose that the structure is at least part of a wall structure, and the distribution duct (20a or 20b) is arranged in a lower part of the wall structure and the collector duct (20) is arranged in an upper part of the wall structure.

As to claim 10 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of enablement/written description and indefiniteness,

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respectively, discussed above), <u>JEFFERS ET AL.</u> disclose the structure of claim 1 as discussed above.

JEFFERS ET AL. fail to explicitly disclose a collector with at least one opening for removing ventilating air from the structure.

,<u>PALMER ET AL.</u> disclose a collector duct (20) with at least one opening (see hole pattern 21) "for removing ventilating air from the structure" (the structure of <u>PALMER ET AL.</u> is capable of performing the recited intended use within quotation marks).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the structure of <u>JEFFERS ET AL.</u> by including a distribution duct with at least one opening as taught by <u>PALMER ET AL.</u> in order to easily distribute ventilating air to the structure.

As to claim 11 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of enablement/written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> in view of <u>PALMER ET AL.</u> disclose the structure of claim 10 as discussed above, and <u>PALMER ET AL.</u> also disclose that the collector duct (20) "removes ventilating air from the structure to a mechanical air extractor (fan 40 or 41)" (the structure of <u>PALMER ET AL.</u> is capable of performing the intended use within quotation marks).

As to claim 12 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of enablement/written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> in view of <u>PALMER ET AL.</u> disclose the structure of claim 11 as discussed above, and <u>PALMER ET AL.</u> also

disclose that the collector duct (20) "removes ventilating air from the structure to a mechanical air extractor (fan 40 or 41) that also ventilates air from a bathroom" (the structure of <u>PALMER ET AL.</u> is capable of performing the recited intended use within quotation marks).

As to claim 13 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of enablement/written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> in view of <u>PALMER ET AL.</u> disclose the structure of claim 10 as discussed above, and <u>PALMER ET AL.</u> also disclose that the collection duct (20) includes a plurality of openings (see hole pattern 21 which shows openings with progressively changing sizes) with progressively changing sizes "configured to minimize dead space in the air channel" (the structure of <u>PALMER ET AL.</u> is capable of performing the recited intended use within quotation marks).

As to claim 14 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of enablement/written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> in view of <u>PALMER ET AL.</u> disclose the structure of claim 10 as discussed above, and <u>PALMER ET AL.</u> also disclose that the collection duct (20) includes a plurality of openings (see hole pattern 21 which shows openings progressively closer to one another), the openings ordered to be progressively closer to one another "to minimize dead space in the air channel" (the structure of <u>PALMER ET AL.</u> is capable of performing the recited intended use within quotation marks).

Claims 15, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>JEFFERS ET AL.</u> (U.S. Patent No. 6,189,270) in view of either <u>LONDON</u> (U.S. Patent No. 2,039,601) or <u>LEHR ET AL.</u> (U.S. Patent No. 4,736,561).

As to claim 15 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> disclose the structure of claim 1 as discussed above.

JEFFERS ET AL. fail to explicitly disclose that the second rigid surface sheet comprises mineral board.

LONDON discloses a building construction having walls (B or F) and a ceiling (C) made of panels having spacer protrusions (11) which are in contact with mineral board (10, 14 - see page 2, lines 39-42, wherein it states plaster-board which is equivalent to mineral board)).

<u>LEHR ET AL.</u> disclose that it is well known in the art for using mineral board (6) in panels (16), wherein the mineral board serves as the outer facing of the panel and is contact with spacer protrusions (8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the structure of <u>JEFFERS ET AL.</u> by making the second rigid surface sheet or outer skin (right 90 in Fig. 18) thereof be mineral board as taught by either <u>LONDON</u> or <u>LEHR ET AL.</u> in order to provide a serviceable, inexpensive, water-resistant facing material for the panel.

As to claim 22 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> disclose the structure of claim 18 as discussed above.

JEFFERS ET AL. fail to explicitly disclose that the third rigid surface sheet comprises mineral board.

LONDON discloses a building construction having walls (B or F) and a ceiling (C) made of panels having spacer protrusions (11) which are in contact with mineral board (10, 14 - see page 2, lines 39-42 wherein it states plaster-board which is equivalent to mineral board)).

LEHR ET AL. disclose that it is well known in the art for using mineral board (6) in panels (16), wherein the mineral board serves as the outer facing of the panel and is contact with spacer protrusions (8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the structure of <u>JEFFERS ET AL.</u> by making the third rigid surface sheet (left 90 in Fig. 18) thereof be mineral board as taught by either <u>LONDON</u> or <u>LEHR ET AL.</u> in order to provide a serviceable, inexpensive, water-resistant facing material for the panel.

As to claim 23 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> disclose the structure of claim 18 as discussed above.

JEFFERS ET AL. fail to explicitly disclose that the third rigid surface sheet comprises at least part organic building board.

LONDON discloses a building construction having walls (B or F) and a ceiling (C) made of panels having spacer protrusions (11) which are in contact with mineral board (10, 14 - see page 2, lines 39-42 wherein it states plaster-board, which is equivalent to mineral board, and is at least part organic building board).

LEHR ET AL. disclose that it is well known in the art for using mineral board (6, which is at least part organic) in panels (16), wherein the mineral board serves as the outer facing of the panel and is contact with spacer protrusions (8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the structure of <u>JEFFERS ET AL.</u> by making the third rigid surface sheet or outer skin (left 90 in Fig. 18) thereof be at least part organic building board as taught by either <u>LONDON</u> or <u>LEHR ET AL.</u> in order to provide a serviceable, inexpensive, water-resistant facing material for the panel.

Claims 16 and 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>JEFFERS ET AL.</u> (U.S. Patent No. 6,189,270) in view of either <u>ISHIKAWA ET AL.</u> (U.S. Patent No. 5,678,369) or <u>MARANGONI ET AL.</u> (U.S. Patent No. 6,446,396).

As to claim 16 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of written description and indefiniteness,

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respectively, discussed above), <u>JEFFERS ET AL.</u> disclose the structure of claim 1 as discussed above.

JEFFERS ET AL. fail to explicitly disclose that the second rigid surface sheet comprises a coated steel plate.

Either <u>ISHIKAWA ET AL.</u> or <u>MARANGONI ET AL.</u> disclose that it is well known in the art to face a panel with a coated steel plate (surfacing materials 2, 14 in Fig. 1 and as noted at col. 9, line 66 through col. 10, line 4 of <u>ISHIKAWA ET AL.</u>; 96' in Fig. 9 and as noted col. 7, lines 58-61 in <u>MARANGONI ET AL.</u>).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the structure of <u>JEFFERS ET AL.</u> by making the third rigid surface sheet or outer skin (right 90 of Fig. 18) thereof be a coated steel plate as taught by either <u>ISHIKAWA ET AL.</u> or <u>MARANGONI ET AL.</u> in order to provide a serviceable, inexpensive, water-resistant facing material for the panel.

As to claim 24 (and as best understood despite the 35 U.S.C. § 112, first and second paragraph, lack of written description and indefiniteness, respectively, discussed above), <u>JEFFERS ET AL.</u> disclose the structure of claim 18 as discussed above.

JEFFERS ET AL. fail to explicitly disclose that the third rigid surface sheet comprises a coated steel plate.

Either <u>ISHIKAWA ET AL.</u> or <u>MARANGONI ET AL.</u> disclose that it is well known in the art to face a panel with a coated steel plate (surfacing materials 2,

14 in Fig. 1 and as noted at col. 9, line 66 through col. 10, line 4 of <u>ISHIKAWA ET AL.</u>; 96' in Fig. 9 and as noted col. 7, lines 58-61 in <u>MARANGONI ET AL.</u>).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the structure of <u>JEFFERS ET AL.</u> by making the third rigid surface sheet or outer skin (right 90 of Fig. 18) thereof be a coated steel plate as taught by either <u>ISHIKAWA ET AL.</u> or <u>MARANGONI ET AL.</u> in order to provide a serviceable, inexpensive, water-resistant facing material for the panel.

Response to Arguments

Applicant's arguments filed 25 March 2009 have been fully considered but they are not persuasive.

More particularly, with respect to both the examiner's 35 U.S.C. 102b) and 103(a) rejections, Applicant argues that the references fail "to disclose air between the first surface side of the first rigid sheet and second rigid surface sheet that has moisture content sufficiently low to inhibit fungal growth." The examiner disagrees because amended claim 1 has a recitation of intended use in the last three lines thereof (i.e., "for ventilation sir through the structure, such that air between the first surface side of the first rigid sheet and the second rigid surface sheet has moisture content sufficiently low to inhibit fungal growth"). Therefore, the examiner's references only need be capable of performing the recited intended use in order to either anticipate the claims or render obvious the claims. In the present case, the structure of the <u>JEFFERS ET AL</u>. reference,

either alone or as modified by any of the secondary references cited in the Office Action mailed 09 June 2008, is capable of being "for ventilation sir through the structure, such that air between the first surface side of the first rigid sheet and the second rigid surface sheet has moisture content sufficiently low to inhibit fungal growth" and thus, the claims are either anticipated or rendered obvious by JEFFERS ET AL., either alone or in combination.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gay Ann Spahn whose telephone number is (571)-272-7731. The examiner can normally be reached on Monday through Friday, 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard E. Chilcot can be reached on (571)-272-6777. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gay Ann Spahn/ Gay Ann Spahn, Primary Examiner June 1, 2009